DOCUMENT RESUME

ED 198 453 CG 014 988

AUTHOR Inwald, Robin E.
TITLE Effect of Two-Parent Home Background on Race Differences in Psychological Testing.
PUB DATE Sep 80
NOTE 15p.: Paper presented at the Annual Convention of the American Psychological Association (88th, Montreal, Quebec, Canada, September 1-5, 1980).
AVAILABLE FROM Hilson Research Inc., 333 West End Avenue, Suite 12B, New York, NY 10013 ($1.50 or 10 for $10.00)

EDRS PRICE MF01 Plus Postage. PC Not Available from EDRS.
DESCRIPTORS Blacks; Correctional Institutions; Family Characteristics; Family Influence; Hispanic Americans; *Institutional Personnel; *Law Enforcement; Nuclear Family; *Personality Assessment; *Personality Measures; Police; Psychometrics; *Racial Differences; *Screening Tests; Whites
IDENTIFIERS *Minnesota Multiphasic Personality Inventory

ABSTRACT

The Minnesota Multiphasic Personality Inventory (MMPI) is the most widely used personality assessment instrument in law enforcement agencies today. Race-related differences on MMPI validity and clinical scales have been the subject of much debate and research in recent years. Male correction officer candidates (N=395) of white, Black and Hispanic origin completed the MMPI and the Inwald Personality Inventory (IPI), an inventory specifically designed for use in psychological screening of law enforcement officers. Significant differences between races were found on the L, F, K, Hs, Pt and Sc scales of the MMPI, and AS, PH, AN, IC, ID and DT scales of the IPI. When scores were analyzed for the sub-group of 258 candidates who reported being raised in two-parent homes, differences remained on only two scales. Hispanics scored higher than the other two groups on the L scale, and Blacks scored higher on the DT scale. Further consideration should be given to family background characteristics when exploring racial differences in personality testing. (Author/KMF)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED198453

HARD COPY NOT AVAILABLE

Effect of Two-Parent Home Background on Race Differences in Psychological Testing

Robin E. Inwald

U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

"PERMISSION TO REPRODUCE THIS MATERIAL IN MICROFICHE ONLY HAS BEEN GRANTED BY

Robin E. Inwald

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

CG014988

Running head: Effect of Two-parent Home Background

Effect of Two-Parent Home Background on Race Differences in Psychological Testing

Race-related differences on Minnesota Multiphasic Personality Inventory (MMPI) validity and clinical scales have been the subject of much debate and research in recent years (Gynther, 1972; Davis, 1975; Rosenblatt and Pritchard, 1978; Gynther, Lachar, and Dahlstrom, 1978). This issue is of special interest in the law enforcement field, where any psychological testing for use in employee selection must be carefully monitered to avoid adverse impact in hiring patterns.

It is probable that the MMPI is the most widely-used personality assessment instrument in law enforcement agencies today, in addition to its continued wide use for clinical populations. One Survey found that 39 of 80 state and local police agencies who claimed to use psychological tests used the MMPI (Murphy, 1972), while another study found the MMPI to be most frequently mentioned psychological test used for screening officers in state correctional systems (Goldstein, 1975).

The purpose of the research reported here was to determine whether of not there are significant differences between urban White, Black, and Hispanic law enforcement job applicants on the MMPI, and on the IPI, Inwald Personality Inventory, an inventory specifically designed for use in the psychological screening of law enforcement officers (Inwald, Note 1). A second purpose was to investigate family background as a possible contributor to any found differences.

Subjects

The 395 subjects in this study consisted of 141 White, 173 Black, and 81 Hispanic males who applied for the job of "Correction Officer" with a large urban correctional department during the fall of 1979. All subjects had passed a "Training and Experience" evaluation of education or on-job-training in the law enforcement field, and all had completed a high school education. They were also required to be over the age of 20, and under the age of 29 at the time of job appointment, although age requirements were modified for those with previous military experience.

Each candidate filled out a detailed "Personal History Questionnaire" that provided background information to the Psychological Research and Assessment Services Unit. The mean ages were found to be 27.5 for White, 28.4 for Black, and 28.4 for Hispanics candidates.

In addition, there were no significant differences found between the three groups in education (47.4% had at least one year of college), Marital status (52.9% were married), previous employment (64.4% had held a single job for longer than two years), driving or arrest records (35.8% had been arrested), history of psychological treatment (6.8% reported some counseling), or military experience 74.4% had served in the military). One question, asking whether a candidate had lived with both parents until he was 15, was answered negatively more often by Blacks than Whites or Hispanics (x^2 =15.2, df=2, $p \leq .001$).

Experiment 1

Method

Subjects. Subjects were given the standard long form of the MMPI, and the 310-item IPI, which were both computer scored. Analyses were then completed on uncorrected raw scores by the SPSS computer program.

For the MMPI, the three validity scales and ten clinical scales were evaluated. The ten IPI scale used in this study were Guardedness (GD), Job difficulties (JD), Trouble with Law (TL), Anti-social Attitudes (AS), Hyperactivity (HP), Phobias (PH), Substance Abuse (SA), Anxiety (AN), Illness Concerns (IC), Interpersonal Difficulties (ID), and Unusual Thoughts (UT).

Results

Significant differences in raw scores between White, Black, and Hispanic subjects were found on several scales of the MMPI and IPI. Means and standard deviations for the three groups are presented in Tables 1 and 2.

Insert Tables 1 and 2 here

A one-way analysis of variance (ANOVA) was performed on each of the MMPI and IPI scales to test for differences by race. It can be seen that on the MMPI, Hispanics scored higher on the L scale, Whites on K, and Blacks scored higher on the F, Hs, Pt, and Sc scales (F ranges from 6.8 to 11.9, df=2, $p \leq .001$). On the IPI, Black candidates scored higher on the AS, PH, AN, IC, ID, and UT scales (F ranges from 7.7 to 27.8, df=2, $p \leq .001$).

A second analysis was completed for the 258 subjects who reported that they had lived with both parents in their home at least until they had reached the age of 15. The candidates making up this group included 106 Whites (75.2% of total White candidates), 95 Blacks (54.9% of total Black candidates), and 57 Hispanics (70.4% of total Hispanic candidates).

TABLE #1

Means and Standard Deviations of MMPI Raw Scores

for White, Black, and Hispanic Correction Officer Candidates

Scale	White (n=141)	Black (n=173)	Hispanic (n=81)	Total (n=395)
L	6.2 (2.7)	5.9 (2.6)	7.3 (2.8)*	6.3 (2.8)
F	2.4 (2.0)	3.5 (2.7)*	3.1 (2.0)	3.0 (2.4)
K	19.2 (4.3)*	16.9 (9.4)	18.1 (4.7)	18.2 (4.5)
Hs	1.7 (2.0)	2.6 (2.2)*	2.5 (2.1)	2.2 (2.1)
D	18.2 (2.9)	18.4 (3.3)	18.9 (3.3)	18.4 (3.2)
Hy	19.2 (3.9)	17.2 (4.0)	18.7 (4.2)	18.6 (4.1)
Pd	14.6 (2.8)	15.2 (3.8)	14.4 (3.2)	14.8 (3.4)
Mf	22.5 (4.2)	23.3 (3.8)	22.1 (3.7)	22.8 (3.9)
Pa	8.0 (2.3)	7.3 (2.7)	7.5 (2.4)	7.6 (2.5)
Pt	5.0 (4.0	7.0 (5.5)*	6.1 (4.6)	6.1 (4.9)
Sc	4.7 (3.9)	7.3 (5.4)*	5.8 (4.5)	6.0 (4.8)
Ma	16.4 (3.9)	17.7 (4.7)	16.6 (4.2)	17.0 (4.4)
Si	20.5 (5.5)	22.5 (6.3)	22.6 (5.7)	21.8 (6.0)

* ANOVA: F ranges from 6.8 to 11.9, df=2, $p \leq .001$

TABLE #2

Means and Standard Deviations of IPI Raw Scores for

White, Black, and Hispanic Correction Officer Candidates

Scale	White (n=141)	Black (n=173)	Hispanic (n=81)	Total (n=395)
Gd	9.1 (3.8)	8.9 (3.4)	9.6 (3.7)	9.1 (3.6)
Jd	2.9 (2.2)	3.7 (2.4)	3.6 (2.3)	3.4 (2.3)
Tl	3.3 (2.4)	4.1 (2.7)	3.7 (2.5)	3.8 (2.6)
As	5.2 (3.0)	7.0 (3.5) *	6.5 (3.3)	6.3 (3.4)
Hp	9.3 (4.7)	10.8 (4.9)	9.7 (5.1)	10.1 (4.9)
Ph	6.0 (2.9)	7.9 (3.6) *	7.2 (3.0)	7.1 (3.3)
Sa	7.0 (4.2)	7.9 (4.1)	7.0 (4.5)	7.4 (4.3)
An	13.8 (6.2)	16.8 (7.3) *	16.3 (7.0)	15.6 (7.0)
Ic	6.8 (4.0)	9.0 (5.1) *	8.4 (5.0)	8.1 (4.8)
Id	8.8 (4.4)	12.5 (6.1) *	11.2 (5.3)	10.9 (5.6)
Ut	4.3 (3.4)	7.6 (4.4) *	6.2 (3.7)	6.1 (4.2)

* ANOVA: F ranges from 7.7 to 27.8, df=2, p≤.001

Results of this analysis are presented in Tables 3 and 4.

Insert Tables 3 and 4 here

Means and standard deviations were computed, and a one-way analysis of variance (ANOVA) was again applied to each scale by race. It can be seen that when the family background characteristic was taken into account, signifcant differences between Whites, Blacks, and Hispanics remained on only two of the twelve scales that had previously shown such differences. Hispanics continued to have significantly higher L scale scores on the MMPI than did Whites or Blacks ($F=10.6$, $df=2$, $p \leq .000$), and Blacks scored higher than Whites or Hispanics on the UT scale of the IPI ($F=16.7$, $df=2$, $p \leq .000$).

Discussion

The finding reported here indicate that MMPI and IPI differences by race are significantly minimized when family background is taken into account. In order to evaluate the meaning of these results, it is necessary to look at the past research efforts in this area.

Unfortunately, there are few published studies on racial differences in personality testing for specific populations other than clinical patients and students.

TABLE #3

Means and Standard Deviations of MMPI Raw Scores for Whites, Blacks, and Hispanics from Two Parent homes

Scale	White (n=106)	Black (n=95)	Hispanic (n=57)	Total (n=258)
L	6.0 (2.7)	6.2 (2.5)	7.9 (2.6)*	6.5 (2.7)
F	2.4 (2.1)	3.4 (2.5)	3.1 (1.9)	2.9 (2.2)
K	19.2 (4.3)	17.4 (4.5)	18.9 (4.7)	18.4 (4.5)
Hs	1.8 (2.0)	2.6 (2.2)	2.2 (2.0)	2.2 (2.1)
D	18.4 (3.0)	18.3 (3.2)	18.7 (3.2)	18.4 (3.1)
Hy	19.3 (3.9)	18.6 (3.9)	19.1 (4.3)	19.0 (4.0)
Pd	14.7 (2.6)	15.0 (3.6)	14.2 (3.4)	14.7 (3.2)
Mf	22.7 (4.3)	23.3 (3.7)	21.9 (3.5)	22.7 (3.9)
Pa	8.0 (2.4)	7.4 (2.7)	7.6 (2.4)	7.7 (2.5)
Pt	5.2 (4.0)	6.0 (4.8)	5.3 (4.4)	5.5 (4.4)
Sc	4.8 (4.1)	6.7 (5.2)	5.0 (3.9)	5.5 (4.6)
Ma	16.2 (3.8)	17.1 (4.7)	16.2 (4.4)	16.5 (4.3)
Si	21.1 (5.6)	21.9 (6.2)	22.4 (6.3)	21.7 (6.0)

* ANOVA: $F=10.6$, $df=2$, $p \leq .000$

TABLE #4

Means and Standard Deviations of IPI Raw Scores for Whites, Blacks, and Hispanics from Two Parent Homes

Scale	Whites (n=106)	Black (n=95)	Hispanic (n=57)	Total (n=258)
Gd	8.8 (3.8)	9.3 (3.6)	10.1 (4.0)	9.3 (3.8)
Jd	2.9 (2.2)	3.5 (2.5)	3.3 (2.3)	3.2 (2.4)
Tl	3.4 (2.6)	3.7 (2.5)	3.6 (2.6)	3.6 (2.6)
As	5.1 (3.1)	6.4 (3.6)	6.0 (3.0)	5.8 (3.3)
Hp	9.4 (5.1)	10.2 (4.9)	8.9 (5.1)	9.6 (5.0)
Ph	6.2 (3.0)	7.4 (3.4)	6.8 (2.9)	6.8 (3.1)
Sa	7.0 (4.4)	7.2 (4.0)	6.6 (4.6)	7.0 (4.3)
An	14.1 (6.5)	15.8 (6.4)	14.7 (6.1)	14.9 (6.4)
Ic	6.8 (4.2)	8.4 (4.6)	7.7 (4.8)	7.6 (4.5)
Id	8.8 (4.6)	11.1 (5.6)	9.6 (4.6)	9.9 (5.1)
Ut	4.2 (3.2)	7.3 (4.4)*	5.7 (3.5)	5.7 (4.0)

* ANOVA : $F=16.7$, $df=2$, $p \leq .000$

There were no other studies found regarding race differences for law enforcement officers, although many law enforcement agengies report that they do use personality inventories for pre-employment screening (Saccuzzo, Higgins, and Lewandowski, 1974).

One reason for this apparent dearth of information may be that, in the past, agencies have relied upon private consultants or groups to analyze individual test results. These specialists have been asked to evaluate individual profiles against their own clinical experience and training, rather than by using departmental norms and performance data. Another reason for so little information may be that agencies may not have large numbers of candidates to study at any one time, and may not have large enough percentages of non-white applicants to make valid comparisons.

In any case, it is seen here that while race differences do appear for this sample of law enforcement officer applicants, closer inspection reveals them to be more a function of family background than race. Those with one or no parent(s) show more elevated scores, while candidates who grew with two parents appear similar on test profiles regardless of race. Since personality testing attempts, in part, to measure an indiviual's emotional adjustment to his environment, it is not

surprising to find that being raised in a relatively stable two-parent home is reflected in an individual's scores.

Cultural and/or religious background differences may account for the observed tendency of Hispanics to deny minor shortcomings more often than Blacks or Whites, thus having higher, though not abnormal or invalid, L scales. Similarly, unusual responses tested on the IPI UT scale and correlated with MMPI Sc scale (n=399, r=.65) appear more frequently for Blacks regardless of family background.

It must be noted that these differences do not reflect greater clinical pathology for any group discussed here, since overall means for each race fall within normal limits. When norms for each group are utilized, a profile indicating presence of a personality disorder will remain positive based upon its unusual occurrence when compared with the appropriate normative population.

Since it is premature to generalize the results reported in this article to other populations, additional research is necessary to verify the absence of major race-related differences in testing. In any case, results of this study may be taken into consideration by agencies or individuals concerned with the development of personality assessment involving different racial groups.

Reference Notes

1. Inwald, R.E., Introduction of a Personality Inventory for Use in Psychological Screening of Law Enforcement Officers, Hilson Research Inc., Paper presented at American Psychological Association Annual Convention Montreal, Canada, 1980.

References

Davis, W.E. Race and the differential "power" of the MMPI. Journal of Personality Assessment, 1975, 39, 138-140.

Goldstein, B. Screening for emotional and psychological fitness in correctional officer hiring. Resource center on Correctional Law and Legal Services, Unpublished report, 1975.

Gynther, M.D. White norms and black MMPI's: A prescription for discrimination? Psychological Bulletin, 1972, 78, 386-402.

Gynther, M.D. Lachar, D. & Dahlstrom, W.G. Are special norms for minorities needed? Development of an MMPI F scale for blacks. Journal of Consulting and Clinical Psychology, 1978, 46, 1403-1408.

Murphy, J.J. Current practices in the use of psychological testing by police agencies. Journal of Criminal Law, 1972, 63, 570.

Rosenblatt, A.I. & Pritchard, D.A. Moderators of racial differences on the MMPI. Journal of Consulting and Clinical Psychology, 1978, 46, 1572-1573.

Saccuzzo, D.P. Higgins, C. & Lewandowski, D. Programs for psychological assessment of law enforcement officers: initial evaluation. Psychological Reports, 1974, 35, 651-654.